

## Term 4 Workshops #ICTENSW

Computing Studies • Digital Technologies • STEAM • Primary EdTech • Coding • Arduino • Makespaces

Date: Monday 31<sup>st</sup> October 2016 4pm to 8:40 pm - Dinner included

Venue: Barker College, 91 Pacific Highway, Hornsby NSW 2077

Map: <https://goo.gl/maps/7CFs3rcbHFn>

Cost (no GST)      **\$50** for Members      **\$90** for non-members      **\$20** for university students

Afternoon Tea, Registration and Welcome from 4pm

[Event Webpage \(online registration\)](http://members.ictensw.org.au/event-2339864) <http://members.ictensw.org.au/event-2339864>

### October 2016 Workshops

16:15-16:40	Afternoon Tea and Welcome				
Times	Computing Studies:	Digital Technologies	Arduinos:	STEM/ STEAM	Primary
Session One 16:40 To 17:40	SDD Option: Programming Paradigms: Learning Java OOP Lael Grant	Investigating, creating and communicating with ICT, K-12 Jo Quinlan	Arduino in practice - planning for their use Phil Barden	Barker and the STEAM experience so far Virginia Ellis	A journey with coding David Frazer
Session Two 17:45 To 18:45	Making Flappy Birds using GameMaker Sam Pennington	MakerSpace hands-on Parra Marist	More on Arduino	Robotics - Inspiring excellence in STEM Sarah Cormio and Lael Grant	Edtech for the primary environment Nicole Jensen
18:50 to 19:30	Dinner and Posters				
Session Three 19:40 To 20:40	IST - IPT - SDD: Computational thinking and curriculum flow Tim Milkins and Malyn Mawby	Pygame Amanda Hogan			Primary Robotics Name: Bronwyn Moreton

### Registration

Register online - <http://members.ictensw.org.au/event-2339864>. Registration is confirmed when payment is received.

### Payments

PayPal is the preferred payment option. This payment option will ensure automatic registration and receipting. Other payment options include mailing the invoice with payment or electronic transfer payments. [Please register on the ICTENSW website](#) to generate your invoice and for electronic payment details.

Need help - please contact the treasurer - [treasurer@ictensw.org.au](mailto:treasurer@ictensw.org.au) or secretary [secretary@ictensw.org.au](mailto:secretary@ictensw.org.au)



Completing the ICTENSW hands on workshops, 31 October 2016 will contribute 3.5 hours of QTC Registered PD addressing 6.2.2; 6.4.2; 7.4.2 from the Australian Professional Standards for Teachers towards maintaining Proficient Teacher Accreditation in NSW.

## Workshop Descriptions

### *SDD Option - Programming Paradigms: Learning Java OOP*

Presenter: Lael Grant

Participants will learn the basics of object orientated programming (OOP) through analysis and design of the game Space Invaders from a syllabus concept perspective. Participants will have the opportunity to code portions of a practical example of the game in the Greenfoot programming environment. Greenfoot is an IDE using the Java programming language, with an API that makes programming objects and learning OOP concepts simple.

### *Investigating, creating and communicating with ICT, K-12*

Presenter: Jo Quinlen

A teacher with over 25 years' experience in the K-6 sector, Jo is currently working in a senior school library and in this workshop, she shares her passion for leveraging digital technologies in contemporary learning environments. Jo will "show and tell" how she has worked collaboratively with colleagues for the past 10 years in co-teaching environments, making use of General Capabilities and ISTE Standards to develop and build capacity in staff and students in their understanding and practice of using ICT in learning.

### *IST - IPT - SDD: Computational thinking and curriculum flow*

Presenter: Tim Milkins and Malyn Mawby

Computational thinking and strategic curriculum design are critical for a successful computer science program. In this session participants will examine an aspect of computational thinking and explore experiences developing Computer Science and Digital curriculum. Focus will be given to creating a continuum of curriculum flow for students from Year 7 to 12, with emphasis on IST, IPT and SDD. Discussion will take place around planning student learning experience, skill development and progression through different stage and syllabus requirements.

### *Arduino in practice - planning for their use*

Presenter: Phillip Barden

After a recent experience in a STEM initiative, Phil decided to explore how his students could use Arduinos in the development of their technology projects. He will share his experience of learning to control, code and use the Arduino platform for a range of different projects.

### *Barker and the STEAM experience so far*

Presenter: Virginia Ellis

Description: In this session Virginia will provide an overview of her experience as STEAM Coordinator at Barker and examine what she has learnt during her journey in this role.

### *Robotics - Inspiring excellence in STEM*

Presenter: Sarah Cormio, Lael Grant and

Description: This session will explore the the experiences of the Barker Robotics adventure from it beginning to present and future.

### *A Journey with Code*

Presenter: David Frazer

Have you ever created code? In the session you will get to be a student and code. I'd like to share my experience from the beginning of implementing 'Code' with primary aged children on the iPad. We will be looking at a variety of apps from Lightbot, Tynker, Hopscotch and the most recent Swift Playgrounds. We will also look at ways of linking code with Spheros.